

REMARKS

Entry of the foregoing and further and favorable consideration of the subject application are respectfully requested and such action is earnestly solicited.

As correctly stated in the Official Action, Claims 1-34 are pending in the present application. Claims 1-34 stand rejected.

By the present amendment, Claims 8-15, 23-28, and 31-33 have been canceled, without prejudice to or disclaimer of the subject matter contained therein. Applicants expressly reserve the right to file a continuation or divisional application on any subject matter canceled by the present amendment. Claims 1, 16, and 19-22 have been amended as suggested by the Examiner. New Claims 35-37 have been added. Support for these new claims can be found on, at least, page 14, lines 27-35, and the Abstract of the originally filed specification. No new matter has been added.

Objections to the Abstract

The Examiner objects to the abstract because a marked-up copy has not been provided. The Examiner also suggests several changes. Applicants submit herewith a marked up copy of the abstract appearing on the front of the PCT publication and a clean revised Abstract on a separate sheet, incorporating the Examiner's suggestions.

Withdrawal of this objection is respectfully requested.

Objections to the Drawings

The Examiner requests a set of formal drawings. Applicants submit herewith a set of formal drawings. Withdrawal of this objection is respectfully requested.

Objections to the Specification

The Examiner objects to the specification as allegedly containing numerous informalities. Applicants submit herewith a revised specification and marked-up copy incorporating the Examiner's suggested changes. Withdrawal of this objection is respectfully requested.

Claim Objections

Claims 1-7 and 34 stand objected to. Claim 1 has been amended as suggested by the Examiner. Withdrawal of this objection is respectfully requested.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 8-22 and 27-30 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. By the present amendment, Claims 8-15, 27, and 28 have been canceled by the present amendment, thereby mooting this rejection as it applies to these claims. Without conceding to the merits of this rejection, and solely in an effort to expedite prosecution, Claims 16 and 19-22 have been amended as suggested by the Examiner. Withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-34 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Applicants' disclosure, Barrocas (U.S.P.N. 4,232,179), Toms (U.S.P.N. '5,417,679), Bruggeman (U.S.P.N. 5,721,295), Cargill (WO94/07941, and Dupont (WO95/29200). The Examiner asserts that the specification, Toms, and Cargill admit that it is known to produce components for absorbent articles from polyethene derived from non-renewable materials. The Examiner also argues that the instant specification, Toms, and Cargill disclose that the manufacture of polyethene is known. Accordingly, the Examiner surmises that the novelty of the present invention is the use of renewable raw materials in the manufacture of polyethene for use in absorbent articles or packaging materials. The Examiner argues that the instant specification, Bruggeman, Cargill, and Dupont disclose that it is desirable to make environmentally friendly materials or packages by using films, materials, and components used from renewable raw materials. Thus, the Examiner concludes it would be obvious to make absorbent articles from polyethene from a renewable raw material. Claims 8-15, 23-28, and 31-33 have been canceled by the present amendment, thereby mooting this rejection as it applies to these claims. This rejection, to the extent that it may apply to the remaining claims, as amended, is respectfully traversed.

In order to establish a case of *prima facie* obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation to modify the reference or combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art reference(s) must teach or suggest all of the claim limitations. *See* M.P.E.P. § 2142. Applicants respectfully submit that these criteria have not been met.

Applicants respectfully submit that none of the cited references, either alone or in combination, disclose or suggest all of the elements of the presently claimed invention, *i.e.*, the use of polyethene from renewable raw materials to make absorbent articles and packaging materials. Barrocas merely discloses a process for preparing ethene from ethanol and states that ethene has become an essential raw material in the plastic industry. Moreover, the cited publications and the present invention solve different problems. Toms, Bruggeman, Cargill, and Dupont relate to the use of a biodegradable polymer material in absorbent products instead of a non-biodegradable material (like polyethene). These publications refer to the problem with disposing the absorbing products in an environmentally friendly way, which is solved by using biodegradable material in the products. The object of the presently claimed invention is to produce absorbent articles and packages in an environmentally friendly way by not using non-renewable sources of material. This problem is solved by using renewable material for producing the polyethylene that is used in manufacturing the absorbent product and packages.

The Examiner argues that the cited documents disclose "that it is also known and desired to create environmentally friendly diapers or packages by using films, materials, and components produced of renewable raw materials rather than non-renewable raw material." [Office Action, page 6, lines 4-6). However, the material chosen in the absorbent articles of the cited publications are chosen because they are **biodegradable**. This is disclosed in the text passages cited by the Examiner in the Office Action on page 6. The choice of **biodegradable** material, not material from renewable sources, solves the problem with the handling of the articles after use in the cited publications.

The Examiner asks where the cited publications disclose that polyethene from renewable sources is undesirable. In Cargill, it is noted on page 1, line 37 to page 2, line 5, that "[c]urrently, films comprising polymers such as polyethylene, polypropylene.... are popular for their superior extrusion and film-making properties. However, these films are not biodegradable. Furthermore, these films are generally noncompostable, which is undesirable from an environmental point of view." The material in Cargill should be biodegradable - polyethylene is **not** biodegradable and therefore is not a desired material. The person skilled in the art, reviewing Cargill, would **not** choose polyethylene at all, even from renewable material, because polyethylene, **regardless of whether it is made from renewable material or not**, is substantially non-biodegradable.

Toms discloses in col. 1, lines 48-50, that there is a need to replace polyethylene backsheets. Bruggeman refers to water-soluble and/or water-swellaable polymers. Because polyethylene is not such a polymer, Bruggeman does not mention polyethylene. Additionally, the polymers in Bruggeman should also be biodegradable. Accordingly, polyethylene is of no interest to Bruggeman.

Further, the Examiner asserts on pages 7-8 of the Office Action that, "materials based on renewable materials, are, at least in theory, biodegradable, i.e. that polythene of renewable materials would be biodegradable." The sugar-based polymer disclosed in Dordick '421 has sugar incorporated into the polymer backbone (see, *e.g.*, abstract), rendering it biodegradable. This is not the case with polyethylene. Applicants are unable to discern that the text the Examiner refers to on page 7 of the Office Action says that polyethylene produced from a renewable material should be biodegradable, even

theoretically. Additionally, Applicants are unclear as to how the paragraph bridging page 3 and 4 in the present specification discloses that materials based on renewable raw materials are, at least in theory, biodegradable. Polyethylene from renewable raw materials and from non-renewable raw materials has the same structure. Absent some explicitly disclosed structural modification (such as a modified sugar backbone in the polymer disclosed in Dordick), there is no reason to believe that polyethylene from renewable sources is any more biodegradable than polyethylene from non-renewable sources.

All of the cited publications, other than the present specification, relate to biodegradable material, some of them intend to replace polyethylene. The Examiner seems to be stating that all material made from renewable material is biodegradable. The only publication mentioning biodegradable renewable materials is Bruggeman. However, polyethylene is not mentioned anywhere in this publication. Polyethylene is considered to be a substantially nonbiodegradable material regardless of the material from which it is made.

In summary, all of the cited publications refer to different solutions to waste problems associated with disposable absorbent articles - specifically, these publications deal with solving the problem of waste after use. The presently claimed invention deals with solving problems during production. Moreover, the cited publications teach away from using polyethylene entirely, rather than disclosing or suggesting the use of polyethylene produced from renewable raw materials. Accordingly, Applicants respectfully submit that the presently claimed invention is not obvious over the cited publications. Withdrawal of this rejection is respectfully requested.

Conclusions

From the foregoing, further and favorable consideration of the subject application in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

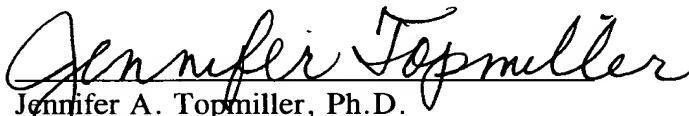
If there are any questions concerning this amendment, or the application in general, the Examiner is respectfully requested to contact Applicants' undersigned representative by telephone so that prosecution may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By:


Jennifer A. Topmiller, Ph.D.
Registration No. 50,435

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Attachment to Reply & Amendment dated June 9, 2003

Mark-up of Abstract

[The use of material that contains] A material containing polyethene produced from renewable raw material is used as a component of an absorbent article[,] and [the] absorbent [article] articles are made therefrom. A method of producing an absorbent article[, comprising] includes producing ethene from renewable raw material, preferably ethanol, [polymerising] then polymerizing the ethene to polyethene, producing a film that contains [said] the polyethene, forming at least one article component from said film, feeding the component into a machine together with an absorbent body [and possible other sheets] and joining said component to the absorbent article. [A component of an absorbent article made of a material that includes polyethene, said polyethene having been produced from renewable raw material.] [Package including film material] Packaging materials are also made from film which contains polyethene produced [form] from renewable raw material.

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Mark-up of Claims

1. (Twice Amended) A method of making an absorbent article, the method comprising:

producing polyethene [produced] from renewable raw material, and

using the polyethene as a component of the absorbent article.

16. (Twice Amended) A method of producing an absorbent article, said method comprising

producing ethene from renewable raw material;

polymerizing the ethene to polyethene;

producing film containing said polyethene;

forming at least one article component from said film;

feeding said component into a machine together with an absorbent body[, and

optionally other sheets]; and

joining said component to the absorbent body.

19. (Twice Amended) The method according to Claim 16, wherein said at least one article component is a liquid-impermeable backing sheet of the absorbent article [is formed from said film].

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20. (Twice Amended) The method according to Claim 16, wherein said at least one article component is an outer sheet or top sheet of the absorbent article [is formed from said film].

21. (Twice Amended) The method according to Claim 16, wherein said at least one article component is waist elastic of the absorbent article [is formed from said film].

22. (Twice Amended) The method according to Claim 16, wherein said at least one article component is a fastener device of the absorbent article [is formed from said film].